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EXAMINER
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CUMMING, WILLIAM D

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/873,439

Applicant(s)

ENGLISH, ET AL

Examiner

WILLIAM D CUMMING

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22, 24-33, 35-45 and 47-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22, 24-33, 35-45 and 47-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "*The disclosure concerns,*" "*The disclosure defined by this invention,*" "*The disclosure describes,*" etc.

2. The abstract of the disclosure is objected to because implied phrases.

Correction is required. See MPEP § 608.01(b).

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, the term "...said impulse radio units..." lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5, 6, 7, 12, 13, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 53, 55, 56, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Fullerton, et al** (United States Patent Application Publication 2005/0018640).

**Fullerton, et al** disclose a wireless network (figures 10 and 11) comprising a mobile node (#1104 & 1124) and a plurality of access points (#1106, 1108, 1110). It has been held that the recitation that an element is "*capable of*" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Regarding claims that claims handoff, **Fullerton, et al** show "In step 1210 a connection is established between the primary impulse radio portal and the local area network. Although herein a local area network is described, it is understood that a wide area network or any network architecture (such as the Internet) is equally applicable for interface with the impulse radio portal. In step 1214 a determination as to whether or not the mobile unit is moving is made. If YES, then continue monitoring the position of the mobile unit and signal strength in relation to all impulse radio portals. In step, 1222, a determination is made if the signal strength is strongest with the current impulse radio portal. If NO, then a handoff is made to the impulse radio portal with the strongest signal (this is now the primary impulse radio portal) and a return to step 1214 is accomplished. If in step 1222, YES is determined and therefore the current impulse radio has the strongest signal, in step 1212 it is determined if the signal strength is adequate

for the data rate sought. As described above and in the patents and patent applications incorporated herein by reference, signal strength and data rate are related in impulse radios. Hence, if a low signal strength and low signal to noise ratio are present, the integration of more pulses to retrieve a data bit would be required. Thereby, lowering the data rate. Thus, if YES in step 212, then the position with the current signal to noise ratio is adequate for the data rate required and no suggested position for the mobile unit is sent.”

Regarding claims that claims determining a position of the mobile node, *“Impulse systems can measure distances to extremely fine resolution because of the absence of ambiguous cycles in the waveform. Narrow band systems, on the other hand, are limited to the modulation envelope and cannot easily distinguish precisely which RF cycle is associated with each data bit because the cycle-to-cycle amplitude differences are so small they are masked by link or system noise. Since the impulse radio waveform has no multi-cycle ambiguity, this allows positive determination of the waveform position to less than a wavelength—potentially, down to the noise floor of the system. This time position measurement can be used to measure propagation delay to determine link distance, and once link distance is known, to transfer a time reference to an equivalently high degree of precision. The inventors of the present invention have built systems that have shown the potential for centimeter distance resolution, which is equivalent to about 30 ps of time transfer resolution. See, for example, commonly owned, co-pending applications Ser. No. 09/045,929, filed Mar. 23,*

*1998, titled "Ultrawide-Band Position Determination System and Method", and Ser. No. 09/083,993, filed May 26, 1998, titled "System and Method for Distance Measurement by Inphase and Quadrature Signals in a Radio System", both of which are incorporated herein by reference. Finally, distance measuring and position location using impulse radio using a plurality of distance architectures is enabled in co-pending and commonly owned application Ser. No. 09/456,410, filed Dec. 8, 1999, titled, "System and Method for Monitoring Assets, Objects, People and Animals Utilizing Impulse Radio," and it's parent Ser. No. 09/407,106, filed Sep. 27, 1999, both of which are incorporated herein by reference."*

8. Claims 1, 8, 12, 15, 20-22, 31-33, 53, 54, 55, 56, 57 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Fullerton, et al** (United States Patent 6,611,234).

It has been held that the recitation that an element is "*capable of*" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

9. Claims 1, 8, 12, 15, 20-22, 31-33, 53, 54, 55, 56, 57 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Fullerton, et al** (United States Patent 6,133,876).

It has been held that the recitation that an element is "*capable of*" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

10. Claims 1, 8, 12, 15, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Win, et al**.

**Win, et al** discloses a wireless network (figure 1, 2, 3) comprising a mobile node (#Mobile User or MS) and a plurality of access points (#BS) which is capable of managing a radio coverage area (#WIRELESS SUBSYSTEM) and capable of enabling an impulse radio wireless link with the mobile node (Note Abstract and section III).

It has been held that the recitation that an element is "*capable of*" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.



11. Claims 1, 5, 6, 7, 12, 13, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 53, 55, 56 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 09/501,372 which has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if published under 35 U.S.C. 122(b) or patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future publication or patenting of the copending application. This provisional rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

### ***Claim Rejections - 35 USC § 103***

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 1-4, 7-12, 15-22, 28-33, 35, 39-45, and 50-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tu, et al** in view of **Win, et al**.

Regarding claim 1, **Tu et al.** discloses a wireless network (abstract) comprising:

- a) a mobile node (mobile station (MS)) (#16 fig. 1); and
- b) a plurality of access points (base stations (BS)) (fig. 1-2) each of which is capable of managing a radio coverage area (fig. 1-2) and also capable of enabling an radio wireless link (channel impulse response) with the mobile node (col. 3 line 40 thru col. 4 line 25).

**Tu, et al** does not disclose the radio wireless link being an impulse wireless link. Win, et al teaches the use of a radio wireless link being an impulse wireless link (note Abstract) in a wireless network for the purpose providing communications that are low power, high data rate, fade resistant and relatively shadow free in a dense multipath environment. Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the impulse wireless link and radio units for the purpose providing communications that are low power, high data rate, fade resistant and relatively shadow free in a dense multipath environment, as taught by Win, et al in the wireless network of Tu, et al for the purpose of supporting multimedia traffic and various kinds of user mobility.

Regarding claim 2, **Tu et al.** further discloses the wireless network of claim 1, further comprising: a positioning network capable of determining a position of the mobile node (fig. 1-8, cal. 3 lines 15-50) and also capable of informing (communication) at least a first access point (first base station) about the determined position of the mobile node (MS) (cal. 2 lines 54-60, and ccl. 7 lines 1-12), wherein said mobile node interacting with the first access point can now have more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point (when the first BS spends time to track the movement of the MS before it decides to hand over the MS to the second BS which means mobile node is interacting with the first access point can now have more lead time to interact with a second

access point before said mobile node has to handoff communications to the second access point) (fig. 6-8, col. 2 lines 54-60, and col. 4 lines 25-63).

Regarding claim 3, **Tu et al.** further discloses the wireless network of claim 2, wherein said positioning network further includes a net controller (col. 1 lines 31-63) capable of determining the position of said mobile node by the interaction between said mobile node and at least two reference radio units (first and second base station transmit and receive channel impulse response which means two base stations include two radio units) (fig. 2, col. 1 lines 31-63, cal. 2 lines 54-60, and col. 3 line 17 thru col. 4 line 63).

Regarding claim 4, **Tu et al.** further discloses the wireless network of claim 2, wherein said positioning network is also capable of anticipating which access point of the plurality of access points the mobile node is heading towards by tracking the movement of the mobile node (fig. 1, col. 1 line 18 thru col. 2 line 60, and col. 4 lines 31- 63).

Regarding claim 7, **Tu et al.** further discloses the wireless network of claim 1, the processor accesses to determines whether the MS is being serviced by the microcells, which means the MS can only log into or accesses the wireless if the MS is located in an approved area (cal. 6 line 4 thru cal. 7 line 63).

Regarding claim 8, **Tu et al.** discloses a mobile node (Mobile station (MS)) comprising: an radio unit (when the mobile station (MS) responses with channel impulse response which means the MS is having the radio unit) capable of using radio signals to interact with an access point (base station) (col. 2 line 54 thru cal. 4 line 63).

Regarding claim 9, **Tu et al.** further discloses the mobile node of claim 8, wherein said impulse radio units is further capable of interacting with a position network that determines a position of the impulse radio unit and forwards (transfer) the determined position to a first access point that informs the mobile node when the determined position of the impulse radio unit is within an overlapped area of at least two radio coverage areas of at least two access points (first and second base stations) (abstract, fig. 1, 6-8, col. 2 line 54 thru cal. 4 line 63), wherein said informed mobile node having a wireless link with the first access point now has more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point (fig. 6-8, cal. 2 lines 54-60, and cal. 4 lines 25-63).

Regarding claim 10, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 11, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 12, **Tu et al.** further discloses the mobile node of claim 8, wherein said wireless link is an radio wireless link (channel impulse response) (cal. 3 line 16 thai cal. 4 line 63).

Regarding claim 15, **Tu et al.** discloses a method for improving communications within a wireless network using radio technology (channel impulse response) (cal. 3 line 40 thai cal. 5 line 4), said method comprising the step of:

a) using radio signals (channel impulse response) to enable communications between a mobile node (mobile station) and an access point (base station) (abstract, fig. 2, cal. 3 line 40 thru cal. 4 line 63).

Regarding claim 16, **Tu et al.** further discloses the method of claim 15, further comprising the steps of:

a) generating a map including coordinates of a radio coverage area of each access paint within the wireless network (when base station keeps track of the MS position over time, and depicts a geographical area having several macrocells, which means it is generating the map to coordinates with each access paint within the wireless network) (fig. 1-2, ccl. 3 line 16 thru cal. 5 line 4);

b) determining a position of the mobile node (mobile station) (fig. 2, 7-8, cal. 3 lines 16 thai cal. 5 line 4);

c) informing the mobile node when the determined position of the mobile node is within an overlapped area of the radio coverage areas of at

least two access points (when MS is moving between BS or microcells which means MS is always crossing the overlap coverage radio area) (col. 2 lines 5440, and ccl. 7 lines 1-12);

d) enabling the informed mobile node having a wireless link with a first access point (first BS) to now have more lead time to interact with a second access point (second BS) before said mobile node has to handoff communications to the second access point (when the first BS spending time to track the movement of the MS before it decides to hand over the MS to the second BS which means mobile node interacting with the first access point can now have more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point) (fig. 6-8, cal. 2 lines 54-60, and cal. 4 lines 2543).

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 18, **Tu et al.** further discloses the method of claim 16, wherein said step of determining the position of the mobile node further includes using radio technology to determine the position of the mobile node (cal. 3 line 16 thru col. 5 line 4).

Regarding claim 19, **Tu et al.** further discloses the method of claim 16, wherein said step of determining the position of the mobile node further includes enabling the interaction between the mobile node and at least two reference impulse radio units to determine the position of the mobile node (first and second base station transmit and receive channel impulse response which means two base stations include two impulse radio units) (fig. 2, cal. 1 lines 31-63, cal. 2 lines 54-60, and cal. 3 line 17 thru cal. 4 line 63).

Regarding claim 20, **Tu et al.** discloses a wireless network (abstract) comprising:

- a) a plurality of access points (base stations) each of which is capable of managing a radio coverage area and also capable of enabling a wireless link with a mobile node (mobile station) (abstract, fig. 1-2); and
- b) a positioning network capable of determining a position of the mobile node and also capable of informing at least a first access point (first base station) about the determined position of the mobile node (abstract, fig. 1-2, cal. 3 line 16 thru cal. 5 line 4); and said mobile node interacting with the first access point can now have more lead time to interact with a second access point before said mobile node has handoff communications to the second access point (when the first 65 spending time to track the movement of the MS before it decides to hand over the MS to the second BS which means mobile node interacting with the first access point can now have more lead time to interact with a second



access point before said mobile node has to handoff communications to the second access point) (fig. 1-2, and 7-8, cal. 3 line 16 thru ccl. 5 line 4).

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 22, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 28, **Tu et al.** further discloses the wireless network of claim 20, wherein said mobile node would handoff communications to the second access point after said mobile node moves out of the radio coverage area of the first access point (fig. 1, 6-B, cal. 1 line 66 thru cal. 2 line 60, cal. 6 lines 447).

Regarding claim 29, **Tu et al.** further discloses the wireless network of claim 20, wherein said mobile node would handoff communications to the second access point before a signal quality of the wireless link between said mobile node and the first access point degrades below a predetermined threshold (cal. 6 lines 52-67).

Regarding claim 30, **Tu et al.** further discloses the wireless network of claim 20, wherein said first access point can alert (communication with MS) said mobile node before said mobile node travels into an area known to have interference (tall buildings) (fig. 1, 6-8, cal. 1 lines 43-56, and cal. 6 lines 4-67).

Regarding claim 31, Tu et al. discloses a mobile node (mobile station) (abstract, #16 fig. 1) comprising:

a) an radio unit (when the MS is having the channel impulse response which means the MS comprising an radio unit) capable of interacting with a position network that determines a position of the impulse radio unit (fig. 1-8, cal. 2 line 54 thru col. 4 line 30) and forwards the determined position to a first access point that informs the mobile node when the determined position of the impulse radio unit is within an overlapped area of at least two radio coverage areas of at least two access points (when MS is moving between BSs or microcells which means MS is always crossing the overlap coverage radio area) (fig. 1-8, col. 2 line 54 thru cal. 4 line 30, and cal. 7 lines 1- 12), wherein said informed mobile node having a wireless link with the first access point now has more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point (when the first 65 spending time to track the movement of the MS before it decides to hand over the MS to the second BS which means mobile node interacting with the first access point can now have more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point) (fig. 2-8, col. 1 lines 31-63, cal. 2 lines 5440, and cal. 3 line 17 thru cal. 4 line 63).

Regarding claim 32, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 33, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 35, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 39, this claim is rejected far the same reason as set forth in claim 28.

Regarding claim 40, this claim is rejected far the same reason as set forth in claim 29.

Regarding claim 41, this claim is rejected for the same reason as set forth in claim 30.

Regarding claim 42, Tu et al. discloses a method for improving a roaming (handoff) scheme within a wireless network using radio technology (cal. 3 line 16 thru ccl. 4 line 63), said method comprising the steps of

- a) generating a map (when base station keeps track of the MS position over time, and depicts a geographical area having several macrocells, which means it is generating the map to coordinates with each access point within the wireless network) including coordinates of a radio coverage of each access point within the wireless network;
- b) determining a position of a mobile node (mobile station) (fig. 2, 7-8, cal. 3 lines 16 thru ccl. 5 line 4);
- c) informing (communication) the mobile node when the determined position of the mobile node is within an overlapped area of the radio

coverage areas of at least two access points (when MS is moving between BS or microcells which means MS is always crossing the overlap coverage radio area) (fig. 1-2, cal. 2 lines 54-60, and cal. 7 lines 1-12);

d) enabling the informed mobile node having a wireless link with a first access point to now have more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point (when the first BS spends time to track the movement of the MS before it decides to hand over the MS to the second BS which means mobile node is interacting with the first access point can now have more lead time to interact with a second access point before said mobile node has to handoff communications to the second access point) (fig. 6-8, cal. 2 lines 54-60, and cal. 4 lines 25-43).

Regarding claim 43, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 44, this claim is rejected for the same reason as set forth in claim 18.

Regarding claim 45, this claim is rejected for the same reason as set forth in claim 19.

Regarding claim 50, this claim is rejected for the same reason as set forth in claim 28.

Regarding claim 51 this claim is rejected for the same reason as set forth in claim 29.

Regarding claim 52, this claim is rejected for the same reason as set forth in claim 30.

Regarding claim 27, **Tu et al.** further discloses the wireless network of claim 20, wherein said mobile node would handoff communications to the second access point after completion of a data transfer (fig. 6-8, ccl. 1 line 66 thru ccl. 2 line 60). However, **Tu et al.** does not specifically disclose mobile node would handoff communications to the second access point after completion of data transfer. But, It is well known to one skilled in the art that the mobile station always handoff communication to the second access point after completion of data transfer.

Regarding claim 49, this claim is rejected for the same reason as set forth in claim 27.

It has been held that the recitation that an element is "*capable of*" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

16. Claims 5, 6, 13-14, 24-26, 35-37, and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Win, et al** in view of **Tu et al** and in further view of **Arazi et al**.

Regarding claim 5, **Tu et al.** further disclose the wireless network of claim 1, the wireless communication. However, **Tu et al.** does not specifically disclose the wireless network is a wireless local area network. **Arazi et al.** teaches the wireless network is a wireless local area network (fig. 24, col. 2 lines 35-46, and col. 38 lines 145). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the **Tu et al.** system with the teaching of **Arazi et al.** of wireless network is the wireless local area network in order to detect and determine the position of the mobile device with a number of network base stations to control the handoff.

Regarding claim 6, **Tu et al.** further discloses the wireless network of claim 1, wherein said mobile node is a mobile station. However, **Tu et al.** does not specifically disclose the mobile node is a laptop computer or a personal digital assistant. **Arazi et al.** teaches the mobile node is a laptop computer or a personal digital assistant (fig. 24, col. 38 lines 54-65). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the **Tu et al.** system with the teaching of **Arazi et al.** of mobile node is a laptop computer in order to provide customer with variety choice of devices for accessing service provider or remote access server.

Regarding claim 13 this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 14, **Tu et al.** further discloses the wireless network of claim 1, wherein said mobile node is a mobile station. However, **Tu et al.** does not specifically disclose the mobile node is a personal digital assistant. **Arazi et al.** teaches the mobile node is a personal digital assistant (PDA) (fig. 24, ccl. 38 lines 5445). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the **Tu et al.** system with the teaching of **Arazi et al.** of mobile node is a PDA in order to provide customer with variety choice of devices for accessing service provider or remote access server.

Regarding claim 24, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 25, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 26, this claim is rejected for the same reason as set forth in claim 14.

Regarding claim 35, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 36, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 37, this claim is rejected for the same reason as set forth in claim 14.

Regarding claim 47, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 48, this claim is rejected for the same reason as set forth in claim 14.

It has been held that the recitation that an element is "*capable of*" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

### ***Response to Amendment***

17. Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto

On December 1, 2003, the United States Patent and Trademark Office (Office) established a "*centralized delivery*" policy for patent related correspondence to enable the Office to promptly scan the correspondence into the Office's image file wrapper (IFW) system. The "*centralized delivery*" policy requires most patent related correspondence to be: a) faxed to the central facsimile number ((703) 872-9306), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), or c) mailed to the mailing address set forth in 37 CFR 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450).i The "*centralized delivery*" policy was revised in three follow-up notices. In order to provide further updated information, and to provide a single comprehensive



statement of the Office's current "*centralized delivery*" policy, this notice is issued. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence.

General "*Centralized Delivery*" Policy:

For patent related correspondence, hand carry deliveries must be made to the Customer Service Window, and facsimile transmissions must be sent to the central facsimile number ((703) 872-9306), unless an exception, as noted below, applies. Exceptions to the general policy of "*centralized delivery*" generally involve situations where special handling of the patent related correspondence is available. All the current exceptions are listed in this notice. Correspondence which is not related to a specific patent or patent application, such as a question on policy, on employment, or other general inquiry, is not covered by this notice. Below are two lists which set forth all the current exceptions to the "*centralized delivery*" policy. The first list covers the exceptions for certain hand carried items, and the second list covers the exceptions for certain facsimile transmitted items. Both lists reflect the relocation of most USPTO operations to the Alexandria, Virginia campus.

List I – Exceptions for Certain Hand Carried Correspondence Current exceptions:

Only the following types of correspondence may be delivered (hand-carried) to the specific location provided below instead of the Customer Service Window. If correspondence listed below is carried to the Customer Service

Window, the correspondence will be accepted and routed to the appropriate office.

1. Access Requests:

Requests for access to patent application files may continue to be hand carried to the File Information Unit (FIU) in Room 2E04, 2900 Crystal Drive (South Tower), Arlington VA 22202. Requests for access to patent application files that are maintained in the Image File Wrapper system and that have not yet been published may also be hand carried to the Public Search Facility on the 1st floor of the Madison East building, 600 Dulany Street, Alexandria VA 22314.

2. Patent Term Extensions under 35 U.S.C. § 156:

Patent term extension applications under 35 U.S.C. 156 (Hatch/Waxman) may be hand-carried to the Office of Patent Legal Administration (OPLA) in Room 07D85, 600 Dulany Street (Madison West building), Alexandria VA 22314. At the guard station in Madison West (near the elevators), the security guard should call the OPLA at either (571) 272-7744 or (571) 272-7746 for delivery assistance.

3. Assignments to be Recorded:

Assignments may be hand-carried to the Office of Public Records Customer Service Window on the 2nd floor of the South Tower building, 2900 Crystal Drive, Arlington VA 22202.

4. Office of General Counsel:

Correspondence for the Office of General Counsel may be hand-carried to the Office of General Counsel in Room 10C20, 600 Dulany Street (Madison East building), Alexandria VA 22314. At the guard station in Madison East (near the elevators), the security guard should call the Office of General Counsel at 571-272-7000 for delivery assistance.

5. Solicitor's Office:

Correspondence for the Solicitor's Office may be hand-carried to the Solicitor's Office in Room 8C43, 600 Dulany Street (Madison West building), Alexandria VA 22314. At the guard station in Madison West (near the elevators), the security guard should call the Solicitor's Office at 571-272-9035 for delivery assistance.

6. Interference related correspondence:

Correspondence relating to interferences may be hand-carried to the 1st floor lobby of Madison East building, 600 Dulany Street, Alexandria VA 22314, where a drop-off box for hand-carried documents to be filed with the Board of Patent Appeals and Interferences is located. Customers need to pass through the magnetometer and have the materials passed through the x-ray sensors before placing them in the drop-off box. The drop-off box is for Interference related correspondence **ONLY**. Boxes are not

permitted in the drop-off box. Boxed materials should be hand-carried to Madison East, Room 9B55-A using the following procedures. At either guard station (concourse level or 1st floor) in Madison East (near the elevators), the security guard should call the Board of Patent Appeals and Interferences at 571-272-9797 to obtain authorization to allow entry into the building for delivery to Room 9B55-A. Access to Room 9B55-A is available from 8:30 AM to 4:45 PM only. Documents/boxes hand-carried to the drop-off box or to Room 9B55-A after 4:45 PM (EST) will receive the next day's filing date. Customers desiring a stamped return receipt for their filing need to personally bring their filing and postcard to Room 9B55-A during the hours stated above, or leave the postcard with the filing (postcard must include correct postage mail stamp and the address where the postcard it to be mailed). The Board will stamp the filing date and mail the postcard to the customer.

#### 7. Secrecy Order:

Applications subject to a secrecy order pursuant to 35 U.S.C. 181, or are national security classified, and correspondence related thereto, may be hand-carried to the Licensing and Review location. See 37 CFR Secs. 5.1(c) and 5.2(c). Licensing and review is expected to relocate to the Alexandria campus on April 1, 2005. Effective April 1, 2005, the Licensing and Review location is:

Technology Center 3600, Room 4B31, 501 Dulany Street (Knox building), Alexandria VA 22314.

At the guard station in Knox (near the elevators), the security guard should call Licensing and Review at (571) 272-8203 for delivery assistance. Prior to April 1, 2005, the Licensing and Review location is:

Technology Center 3600, Office of the Director, 2451 Crystal Drive (Crystal Park 5 building), Room 3D07  
Arlington, VA 22202.

8. Explicit Foreign Filing License Petitions:

Effective April 1, 2005, petitions for foreign filing license pursuant to 37 CFR 5.12(b) for which expedited handling is requested and petitions for retroactive license under 37 CFR 5.25, may be hand-carried to Licensing and Review in Room 4B41, 501 Dulany Street (Knox building), Alexandria VA 22314. At the guard station in Knox (near the elevators), the security guard should call Licensing and Review at (571) 272-8187 for delivery assistance.

9. Petitions to Withdraw from Issue:

Petitions to Withdraw from Issue may be hand carried to the Office of Petitions on the 7th floor of the Madison West building, 600 Dulany Street, Alexandria VA 22314. At the guard station in Madison West (near the elevators), the

security guard should call the Office of Petitions at (571) 272-3282 for delivery assistance. Hand carried papers will be accepted between the hours of 8:30 a.m. until 3:45 p.m.

10. Documents requested by the Office of Patent

Publication:

Documents requested by the Office of Patent

Publication may be hand carried to the Office of Patent

Publication in Room 8A24, 2900 Crystal Drive (South Tower building), Arlington VA 22202, during business hours.

Elimination of certain previously authorized exceptions:

Hand carry delivery to a location other than the Customer Service Window is no longer permitted for the following types of correspondence:

(1) correspondence relating to PCT

international applications prior to national stage entry (35 U.S.C. 371) [Note: as of January 14, 2005, there no longer is a separate PCT Operations Customer Window];

(2) petitions for express abandonment to avoid publication under 37 CFR 1.138(c);

(3) requests to initiate, or related to on-going, ex parte or inter partes reexamination proceedings;

(4) design patent applications with a  
corresponding request for expedited examination  
under 37 CFR 1.155; and (5) correspondence for the  
Office of Enrollment and Discipline (OED).

List II -Exceptions for Certain Facsimile Transmitted Correspondence For  
each Office location listed below, only the particular type of correspondence  
indicated may be transmitted to the specific facsimile number at that Office  
location. All other types of facsimile transmitted correspondence must be sent to  
the central facsimile number ((703) 872-9306).

1. Office of Initial Patent Examination (OIPE) Request for corrected Filing  
Receipt:

(703) 746-9195 facsimile number

Response to Notice to File Missing Parts:

(703) 746-4060 facsimile number

Note: New applications, correspondence being submitted for the purpose  
of obtaining an application filing date, and color drawings may NOT be  
transmitted by facsimile. OIPE Customer Service telephone number: (703) 308-  
1202

2. PCT Operations and PCT Legal Administration Correspondence  
subsequent to filing in an international application before the U.S. Receiving

Office, the U.S. International Searching Authority, or the U.S. International Examining Authority:

Papers in international applications:

(703) 305-3230 facsimile number

Response to Decisions on Petition:

(571) 273-0459 facsimile number

Note: An international application for patent or a copy of the international application and the basic national fee necessary to enter the national stage, as specified in 37 CFR 1.495(b), may **NOT** be submitted by facsimile. See 37 CFR 1.6(d)(3) (referencing 37 CFR 1.8(a)(2)(i)(D) and (F)). Subsequent correspondence may be transmitted by facsimile in an application before the U.S. Receiving Office, the U.S. International Searching Authority, or the U.S. International Examining Authority, but it will **NOT** receive the benefit of any certificate of transmission (or mailing). See 37 CFR 1.8(a)(2) (i)(E). Correspondence during national stage, subsequent to entry, are handled in the same manner as a U.S. national application.

The PCT Help Desk:

(571) 273-0419 facsimile number (703) 305-3257 telephone number

3. Office of Patent Publication Payment of an issue fee and any required publication fee by authorization to charge a deposit account or credit card, and drawings:



(703) 746-4000 facsimile number

Note: Although submission of drawings by facsimile may reduce the quality of the drawings, the Office will generally print the drawings as received. Office of Patent Publication telephone numbers to check on receipt of payment: (703) 308-6789 or 1-888-786-0101

4. Office of Pre-Grant Publication Petitions for express abandonment to avoid publication under 37 CFR 1.138(c), and Requests for express abandonment under 37 CFR 1.138: (703) 305-8568 facsimile number

Pre-Grant Publication Division telephone number for questions relating to the publication of patent applications:

(703) 605-4283. Questions may also be directed by e-mail to [pgpub@uspto.gov](mailto:pgpub@uspto.gov).

5. Electronic Business Center (EBC) Requests for Customer Number Data Change (PTO/SB/124), and Requests for a Customer Number (PTO/SB/125): (703) 308-2840 facsimile number.

Note: The EBC may also be reached by e-mail at: [ebc@uspto.gov](mailto:ebc@uspto.gov).

EBC telephone number for customer service and assistance:

(866) 217-9197

6. Assignment Branch Assignments or other documents affecting title:

(703) 306-5995 facsimile number

Note: Customers may submit documents directly into the automated Patent and Trademark Assignment System and receive the resulting recordation

notice at their facsimile machine. (Assignment documents submitted through the Electronic Patent Assignment System also permits the recordation notice to be faxed to customers.) Credit card payments to record assignment documents are now accepted, and use of the Credit Card form (PTO-2038) is required for the credit card information to be separated from the assignment records. Only documents with an identified patent application or patent number, a single cover sheet to record a single type of transaction, and the fee paid by an authorization to charge a USPTO deposit account or credit card may be submitted via facsimile. Please refer to the USPTO Web Site, at <http://www.uspto.gov/web/offices/ac/ido/opr/ptasfax.pdf> for more information regarding the submission of assignment documents via facsimile.

Assignment Branch telephone number for assistance:

(703) 308-9723 7.

Central Reexamination Unit (CRU) *Inter partes* reexamination correspondence, except for the initial request: (571) 273-0100 facsimile number

Note: All *ex parte* reexamination correspondence, except for the initial request, may be sent by facsimile transmission to the central facsimile number. Correspondence related to reexamination proceedings will be separately scanned in the CRU.

CRU telephone number for customer service and inquiries: (571) 272-7705 8.

Board of Patent Appeals and Interferences Correspondence related to pending interferences permitted to be transmitted by facsimile (only where expressly authorized, see 37 CFR 1.6(d)(9)):

(571) 273-0042 facsimile number

Note: Correspondence should not be transmitted to this number if an interference has not yet been declared.

9. Office of the General Counsel Correspondence permitted to be transmitted to the Office of General Counsel:

(571) 273-0099 facsimile number

10. Office of the Solicitor Correspondence permitted to be transmitted by facsimile to the Office of the Solicitor:

(571) 273-0373 facsimile number

11. Licensing and Review Petitions for a foreign filing license pursuant to 37 CFR 5.12(b), including a petition for a foreign filing license where there is no corresponding U.S. application (37 CFR 5.13):

(571) 273-0185 facsimile number (if the fax is transmitted on or after April 1, 2005) (703) 305-7658 facsimile number (if the fax is transmitted prior to April 1, 2005)

Note: Correspondence to be filed in a patent application subject to a secrecy order under 37 CFR Sec. 5.1 through 5.5 and directly related to the secrecy order content of the application may **NOT** be transmitted via facsimile.

See 37 CFR Sec. 1.6(d)(6).

12. Office of Petitions Petitions to Withdraw from Issue:

(571) 273-0025 facsimile number

Note: All other types of petitions must be directed to the Central Facsimile Number ((703) 872-9306). Any paper other than a Petition to Withdraw from Issue which is sent to the Office of Petitions fax number (instead of the Central Facsimile Number) will be discarded. Petitions sent to the Central Facsimile Number should be marked "Special Processing Submission".

Questions regarding this notice may be e-mailed to **PatentPractice@uspto.gov**, or directed to the Inventors' Assistance Center by telephone at (800)786-9199, or (703)308-4357. \_\_\_\_3/2/05\_\_\_\_

18. Oversized Postcards Must Be Submitted With Sufficient Postage

Recently, a number of return receipt postcards have been returned to the U.S. Patent and Trademark Office (Office) because the postcards contained insufficient postage for an oversized postcard. Oversized postcards require First-Class letter postage. Customers are reminded that they are solely responsible for placing the proper postage on self-addressed postcards that are submitted to the Office for the purpose of obtaining a receipt for correspondence being filed in the Office.

Customers should be aware of the following guidance from the USPS regarding postage and acceptability for postcards:

1. In order to be eligible for the First-Class Mail card rates (currently \$0.23 per card, domestic delivery), cards must be of uniform thickness and made of unfolded and uncreased paper or card stock of approximately the quality and weight of a Postal Service stamped card. Cards claimed at the First-Class postcard rate must be:

(a) Rectangular;

(b) No less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick; and

(c) No more than 4-1/4 inches high, 6 inches long, and 0.016 inch thick.

2. Cards that measure more than 4-1/4 inches high, 6 inches long, or 0.016 inch thick are charged postage at the First-Class Mail letter rates.

3. Cards that measure less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick are nonmailable.

Any return receipt postcard that does not contain sufficient postage or is not acceptable may not be delivered by the United States Postal Service (USPS) to the address provided on the postcard, and, if returned to the Office, may be discarded.

For information regarding the Office's postcard receipt practice in patent-related matters, see Manual of Patent Examining Procedure (MPEP) (8th Ed., Rev. 1, Feb. 2003), Section 503. Questions regarding sufficient postage for postcards should be directed to the United States Postal Service. Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center by telephone at (800)786-9199, or (703)308-4357. OG Notices: 29 June 2004

19. Termination of the Waiver of Provisions of 37 CFR 1.8 and 1.10 for

Correspondence Intended for the United States Patent and Trademark Office but

Addressed to Washington, DC 20231

Effective on April 4, 2005, the provisions of 37 CFR 1.8 (Certificate of Mailing) and 1.10 ("Express Mail") will no longer be waived for correspondence addressed to the United States Patent and Trademark Office (USPTO), Washington, DC 20231. On May 1, 2003, the USPTO changed its address for certain correspondence to P.O. Box 1450, Alexandria, VA 22313-1450. See 37 CFR 1.1 and *Correspondence with the*

*United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003), 1269 *Off. Gaz. Pat. Office* 159 (Apr. 22, 2003). To allow applicants time to become accustomed to the new address in Alexandria, VA, the USPTO waived the provisions of 37 CFR 1.8 and 1.10 such that correspondence addressed to Washington, DC 20231 would be treated as acceptable under 37 CFR 1.8 and 1.10 for otherwise compliant Certificates of Mailing and "*Express Mail*." The United States Postal Service (USPS) has ceased forwarding to the USPTO correspondence addressed to Washington, DC 20231. Additionally, the USPTO will no longer arrange for the delivery to Alexandria, VA of correspondence addressed to Washington, DC 20231 after April 3, 2005. Thus, after April 3, 2005, all correspondence addressed to the Washington, DC 20231 address will be returned to sender marked by the USPS as undeliverable. Such mail returned to the sender by the USPS will not be considered proof of prior filing or mailing under 37 CFR 1.8(b) or 1.10(e) since the correspondence was not mailed in accordance with 37 CFR 1.1. Pursuant to 37 CFR 1.1, correspondence intended for the USPTO must be mailed to P.O. Box 1450, Alexandria, VA 22313-1450, except as otherwise provided.

1. Correspondence intended for the USPTO, unless directed otherwise, must be addressed to: Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

2. Correspondence in patent-related matters to organizations reporting to the Commissioner for Patents must be addressed to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

3. Correspondence in trademark-related matters, except documents sent to the Assignment Services Division for recordation, requests for copies of trademark documents, and documents directed to the Madrid Processing Unit, must be addressed to: Commissioner for Trademarks P.O. Box 1451 Alexandria, VA 22313-1451

The above addresses are the USPTO's three general mailing addresses for mail delivered by the USPS; however, the USPTO has separate mailing addresses for certain correspondence as set forth in the notice titled "*Mailing and Hand Carry Addresses for Mail to the United States Patent and Trademark Office*" (formerly, "*Special Mail Stops For Patent Mail*") that is published each week in the Official Gazette Notices and posted on the USPTO Internet web site. Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center (formerly the Patent Assistance Center (PAC)) by telephone at 800-786-9199 or 703-308-4357. Date:       3/1/05      

### ***Double Patenting***

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

21. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

22. Claims 1, 5, 6, 12, 13, 14, and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/915, 074 or 09/501,372. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the current application are broader than the claims in the other application (In re Van Ornum and Stanz, 214 USPQ 761).

23. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Bahl** discloses a method and system for querying the dynamic aspects of wireless connection.



25. Replacement Notice: Copies of Patent Application Records will be Provided in both Electronic and Paper Form

The Official Gazette notice, published on August 24, 2004 entitled "*All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form*" (1285 Off. Gaz. Pat. Off, August 24, 2004) is hereby rescinded. The USPTO is reinstating, until further notice, the procedures in effect prior to July 30, 2004 for providing certified copies of patent application records with paper certification statements. The USPTO will also offer electronic certified copies of patent application records at the requester's option.

#### **Certified Copies with Paper Certification**

Unless otherwise requested, certified copies of patent application records provided pursuant to 37 CFR 1.19 (b) will be produced with a paper certification statement, continuing the practice in effect prior to July 30, 2004. The certification statement will include an embossed seal and original signature.

#### **Certified Copies with Electronic Certification**

Customers ordering certified copies of patent applications as filed or patent-related file wrapper and contents of published applications from the USPTO website will have the option to choose electronic copies with electronic certification. These files include an imaged certification statement as part of a PDF file containing the document TIFF images. These electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. Customers may choose to download these electronic files from the USPTO website or receive them on compact disc.

#### **Paris Convention for the Protection of Industrial Property and Priority**

Irrespective of whether the USPTO provides a paper certified copy or an electronic certified copy, Article 4(d)(3) of the Paris Convention prohibits any country that is a member of the convention from requiring further authentication of the certified copy for purposes of claiming priority under the Paris Convention. (The text of the Paris Convention and a list of its members are available at [www.wipo.int/treaties/en/ip/paris/index.html](http://www.wipo.int/treaties/en/ip/paris/index.html).)

The USPTO is working with other intellectual property offices to encourage the acceptance of priority documents in electronic form with electronic certification. A list of offices and international intellectual property organizations that have agreed to accept electronic certified copies will be posted on the USPTO website soon, and updated regularly.

Questions should be directed to the Office of Public Records by email to [opr@uspto.gov](mailto:opr@uspto.gov) or by telephone at (703) 308-9743.

26. If applicants wish to request for an interview, an *"Applicant Initiated Interview Request"* form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed *"Applicant Initiated Interview Request"* form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

27. USPTO to Provide Electronic Access to Cited U.S. Patent References with Office Actions and Cease Supplying Paper Copies

### Summary

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and U.S. patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the

practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications under the PCT during the international stage.

### Deployment of E-Patent Reference System

The USPTO will deploy the full E-Patent Reference program starting in June of 2004. In accordance with the schedule shown below, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions in the indicated Technology Centers (TCs). Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

#### Schedule

June 2004	TCs 1600, 1700, 2800 and 2900
July 2004	TCs 3600 and 3700
<b>August 2004</b>	<b>TCs 2100 and 2600</b>

### Description of E-Patent Reference System

On December 1, 2003, the Office made available a new feature in the Office's Private PAIR system, E-Patent Reference, to allow convenient downloading and printing of cited U.S. patents and U.S. patent application publications. A notice announcing this system was published in the Official Gazette, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The same notice also announced the Office's future plan to cease supplying copies of cited U.S. patents and patent application publications with Office actions.

The E-Patent Reference system allows an authorized user of Private PAIR to download the U.S. patents and U.S. patent application publications cited on a form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants as part of an information disclosure statement (IDS) on form PTO/SB/08 (1449). The retrieval of some or all of the documents is performed in one downloading step with each of the documents encoded as

Adobe Portable Document format (.pdf) files.

The E-Patent Reference system was used by applicants during a pilot program in December 2003 and January 2004. In response to some technical issues discovered by users, changes to make the system more compatible with users' firewalls and office systems were made during the pilot.

Consequently, applicants should expect to start receiving Office actions (in patent applications and during patent reexamination proceedings) without paper copies of cited U.S. patents and U.S. patent application publications in accordance with the schedule above. These documents will be available through the E-Patent Reference system for downloading using Private PAIR. Foreign patents and non-patent literature will continue to be provided to the applicant on paper. Communications from the Office during the international stage of an international application under the PCT will continue to include paper copies of all references, including U.S. patents and U.S. patent application publications.

In summary, all U.S. patents and patent application publications are available on the USPTO web site, from the Office of Public Records and from commercial sources. Additionally, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible.

#### Steps to Use the E-Patent Reference Feature

Access to Private PAIR is required to utilize E-Patent Reference. If you do not already have access to Private PAIR, the Office urges practitioners and applicants not represented by a practitioner to: (1) obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate; (2) obtain a USPTO customer number; (3) associate all of their pending and new application filings with their customer number; (4) install free software (supplied by the Office) required to access Private PAIR and the E-Patent Reference; and (5) make appropriate arrangements for Internet access.

Instructions for performing the 5 steps:

Step 1: Full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at: <http://www.uspto.gov/ebc/downloads.html>. Note that a notarized signature will be required to obtain a digital certificate.

Step 2: To get a Customer Number, download and complete the Customer Number Request form, PTO-SB/125, at: <http://www.uspto.gov/web/forms/sb0125.pdf>. The completed form can then be transmitted by facsimile to the Patent Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or agent, then your registration number must be associated with your customer number. This association is accomplished by adding your registration number to the Customer Number Request form.

Step 3: A description of associating a customer number with the correspondence address of an application is described at the EBC Web page at: [http://www.uspto.gov/ebc/registration\\_pair.html](http://www.uspto.gov/ebc/registration_pair.html).

Step 4: The software for electronic filing is available for downloading at [www.uspto.gov/ebc](http://www.uspto.gov/ebc). Users can also contact the EFS Help Desk at (703) 305-3028 and request a copy of the software on compact disc. Users will also need Adobe Acrobat Reader, which is available through a link from the USPTO web site.

Step 5: Internet access will be required which applicants may obtain through a supplier of their own choice. As images of large documents must be downloaded, high-speed Internet access is recommended.

The E-Patent Reference feature is accessed using a button on the Private PAIR screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents in the Portable Document Format (.pdf). The downloaded documents can be viewed and printed using

Adobe's Acrobat Reader program and other software.

#### Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents and patent application publications for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide patents and patent application publications.

Section 707.05(a) of the Manual of Patent Examining Procedure, which currently provides that copies of cited references are in general automatically furnished without charge to applicant together with the Office action in which they are cited, will be revised in due course for consistency with the practice announced in this notice.

#### Comments

The Office published a notice announcing its plan to cease supplying copies of cited U.S. patent references with Office actions, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The Office received numerous comments in response to this notice. A summary of representative comments and the Office's responses to the comment, grouped by topics, follows:

Comment 1: The requirement to use the Office's customer number/digital certificate shifts the responsibility of producing paper copies to the applicant. A number of comments indicated that adopting the proposal would result in an increased responsibility for the applicant, as the applicant or applicant's representative would be required to print the references.

Response: The USPTO is implementing the E-Patent Reference program as part of the Office's e-Government initiative and to align funding priorities to the Patent Initiatives, including the

hiring of examiners. Applicants can purchase copies of U.S. patents and patent application publications from a variety of vendors if they choose not to print copies through the E-Patent Reference system.

The USPTO is moving toward electronic filing and processing of both patent applications and trademark applications. The policy announced in this notice is simply a step towards a more fully automated patent examination process. By analogy, briefs and court opinions that include case citations do not include paper copies of the cited cases. Rather, the cited cases are available via books or electronic databases. Similarly, the USPTO will no longer provide paper copies of U.S. patents and patent application publications since they are available electronically free of charge. Finally, this change will avoid duplication and waste since an applicant may not need to print out every page of a cited U.S. patent or patent application publication.

Comment 2: Adopting the proposal would hurt the solo practitioners and pro se applicants the most, which is unfair.

Response: The solo practitioners and pro se applicants have the same electronic access as the larger firms and corporations, available instantaneously over the Internet. If a solo practitioner or a pro se applicant chooses not to print copies of U.S. patents and patent applications publications through the USPTO Patents on the Web system or through the E-Patent Reference system, commercial sources that provide patents very quickly and inexpensively are available, and copies of U.S. patents and patent application publications are also available at the Patent and Trademark Depository Libraries (PTDLs). Additionally, the cost of patents if ordered from the USPTO Office of Public Records is very reasonable (\$3).

Comment 3: Some applicants indicated that the service is reliable and quick, and consistent with the electronic commerce initiatives in their law firms and businesses.

Response: As pointed out by some respondents, electronic copies of the references are very usable, available without mail delays, and capable of being sent to clients, other attorneys and experts by electronic means.

Comment 4: The statute 35 USC Sec. 132 requires the Office when sending a rejection to state the reasons "together with

such information and references as may be useful in judging of the propriety of continuing the prosecution of his application".

Response: The requirement that an Office action contain "such information and references as may be useful in judging of the propriety of continuing the prosecution of his application" was added to the patent laws in the Patent Act of 1870. The circumstances surrounding this provision reveal that it requires that an Office action identify the prior inventions or patents that are relied upon in making a rejection, not that it requires that an Office action be accompanied by copies of the cited references. The USPTO did not even begin providing copies of cited references with Office actions until 1965, when 35 U.S.C. Sec. 41 was amended to authorize (but not require) the USPTO to provide copies of patents cited in Office actions without charge. See 35 U.S.C. Sec. 41(e) ("[t]he Director may provide any applicant issued a notice under [35 U.S.C. Sec. 132] with a copy of the specifications and drawings for all patents referred to in that notice without charge") (emphasis added). Nevertheless, the Office will provide access to U.S. patents and patent application publications, albeit not in paper form.

Comment 5: A number of users suggested that the Office provide paper references at an extra cost.

Response: The Office of Public Records does offer that service, at a reasonable cost, and it is available through a number of delivery channels. See 37 CFR 1.19 (a). Commercial services also provide U.S. reference documents, in person, by mail, and over the Internet.

Comment 6: Some comments indicated that the length of the pilot should have been expanded.

Response: E-Patent Reference system will continue through the end of May to allow applicants to become familiar with E-Patent Reference and to be sure all technical concerns are addressed.

#### For Further Information Contact

Questions concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the Patent EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov. Questions about this notice may be directed to Jay



Lucas, at Jay.Lucas@uspto.gov and Rob Clarke, at Robert.Clarke@uspto.gov. OG  
Notices: 18 May 2004

### **Consolidated Appropriations Act, 2005 enacted on December 8, 2004**

H.R. 4818, the Consolidated Appropriations Act, 2005 (Consolidated Appropriations Act) was signed by President George W. Bush and enacted into law on December 8, 2004. The Consolidated Appropriations Act revises certain patent application and maintenance fees; provides separate fees for a basic filing fee, a search fee, and an examination fee; and requires an additional fee for any patent application whose specification and drawings exceed 100 sheets of paper (application size fee). The new patent fees are now effective and will remain in effect during the remainder of fiscal year 2005 and during fiscal year 2006. The patent maintenance fee changes apply to any maintenance fee payment made on or after December 8, 2004, regardless of the filing or issue date of the patent for which the fee is submitted. The revised maintenance fees took effect on December 8, 2004. Thus, any maintenance fee paid at any time on (or after) December 8, 2004 is subject to the revised maintenance fee amounts set forth in the Consolidated Appropriations Act.

**Note: If you are paying via the USPTO's Internet Web site, there will likely be a delay in updating the maintenance-fee information on the USPTO's Office of Finance On-Line Shopping Web page. Therefore, if paying on-line, please refer to the updated fee schedule to ensure that you include the appropriate updated fee amount. Maintenance fees must be timely paid in the appropriate amount to avoid expiration of a patent.**

The new basic filing fee (or national fee), search fee, examination fee, and application size fee apply to national patent applications (other than provisional applications) filed on or after December 8, 2004, and to international patent applications in which the basic national fee is paid on or after December 8, 2004. The new provisional application filing fee applies to any provisional application filing fee paid on or after December 8, 2004. The filing fee (or national fee), search fee, and examination fee are due on filing. If the filing fee (or national fee) is paid on filing, but the search fee and/or examination fee is missing, the USPTO will issue a notice requiring that any missing search fee and examination fee (but no surcharge until further notice) be paid within a specified period of time in order to avoid abandonment. Thus, if at least the full basic filing fee under the Consolidated Appropriations Act is paid on or after December 8, 2004, the USPTO will issue a notice requiring any balance of the search fee and the examination fee (but no surcharge). The remaining patent application fee changes, including the excess claims fees, extension of time fees, and appeal fees, apply to any fee payment made on or after December 8, 2004, regardless of the filing date of the application for which the fee is submitted.

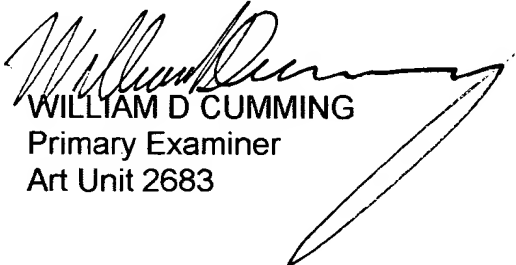
USPTO customers should monitor the USPTO's Internet Web site frequently for current patent fee information.

Payments from foreign countries must be payable and immediately negotiable in the United States for the full amount of the fee required.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM D CUMMING whose telephone number is 571-272-7861. The examiner can normally be reached on Tuesday & Wednesday, 10:30am to 8:30pm,.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
WILLIAM D CUMMING  
Primary Examiner  
Art Unit 2683

Wdc



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